

X-MET8000 Expert



OBJECTIVES

- | Enhance laboratory testing service
- | Understand material behaviour
- | Easy reporting for customers

RESULTS

- | Shortened time between testing and customer order
- | Increased demand for new testing service
- | Ability to use for incoming goods inspection

Bunting-Redditch uses Hitachi's X-MET8000 for laboratory test to form the basis for customer equipment recommendations

Bunting designs and manufactures an extensive range of magnetic separators, eddy current separators, metal detectors, and electrostatic separators. The laboratory team uses Hitachi's X-MET8000 Expert Geo handheld XRF analyzer for a comprehensive elemental analysis to enable technicians to make detailed and accurate recommendations on magnetic separation and detection to assess the feasibility of projects, propose process flowsheet options to customers, and confirm the separation and detection abilities of recommended Bunting equipment.

FASTER MATERIAL TESTING

Prior to purchasing the X-MET8000, samples would be tested and returned to the customer for analysis and feedback. Bunting purchased Hitachi's X-MET8000 Expert Geo handheld XRF analyzer primarily to enhance the laboratory testing service provided at their Customer Experience Centre in Redditch, UK. Phil Tree, Technical Sales Manager, said, "The X-MET8000 has given us a much more professional approach and it has promoted our laboratory to another level."

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Undertaking the analysis in the laboratory reduces the time between testing and equipment recommendation by weeks and, when working on overseas projects, by months. A typical process of testing and analysis now takes between two to three hours for one particular sample, reducing the time scale for processing from one or two months to a day at the most.

“The X-MET8000 has changed the way we undertake laboratory test work,” explained Professor Neil Rowson, Laboratory Manager. “It enables the fine tuning of our tests, and the easy and quick communication of results to our clients. This has significantly shortened the time between testing and the placing of an equipment order. We are also seeing an increase in demand for testing as potential customers learn about our capabilities.”

ANALYTICAL CAPABILITY

As a leading global supplier of high-intensity magnetic separators, electrostatic separators and eddy current separators for the mineral processing and recycling industries, Bunting receives material samples from mineral processing, mining and recycling companies from across the world for controlled tests by technicians for separation and detection.

The X-MET8000 delivers exceptionally quick results which enables laboratory staff to understand how materials behave when testing on magnetic separation and electrostatic separators. The X-MET8000 enables the analysis of metal, mineral and soil samples by identifying elements such as Mg, Al, Si, P, S, Fe. Adjustments to operating parameters such as belt speed, splitter position and capacity are assessed using the X-MET8000, leading to selection and recommendation of the optimum separator and performance criteria.

Professor Neil Rowson, Laboratory Manager, explains “For a typical test sample, like silica sand that is being used in the fibre optic industry and has to be very clean, a customer will send us the raw material and we will process it over high intensity magnetic separators which will remove the weakly magnetic particles and give us a clear non-magnetic product. I will then test those products for iron level and if the percentage meets their specification then we have a process that will work for them.”



MAKING A DIFFERENCE WITH REPORTING AND HITACHI CUSTOMER SERVICE

After looking at a number of handheld XRF manufacturers, Bunting-Redditch decided to buy Hitachi's X-MET8000 Expert Geo for a number of reasons. Professor Neil Rowson, Laboratory Manager adds, "One was its technical specification, also it's ability to generate both excel and PDF results spreadsheets that makes my report writing a lot easier. The other thing I liked about it was the level of technical support, both at the sale stage and more importantly after we purchased it as well. My experience with the Hitachi X-MET8000 has been all positive."

ABILITY TO USE FOR INCOMING INSPECTION

The X-MET8000 is easy to use and very easy to set-up. It's also portable around the site, so although the X-MET8000 was purchased for the laboratory, the analyzer is also frequently used in incoming inspection to check incoming goods for the specification of critical materials and stock control of new metals. Bunting's extensive range of separation and detection equipment often requires a specific grade of stainless steel or other metal. On receipt in goods inwards, Bunting's storeman is able to quickly check and verify the material specification.

"Hitachi's X-MET8000 has been a great investment," said Adrian Coleman, the General Manager. "The X-MET8000 has helped secure new orders and with the subsequent manufacture of equipment."



If you would like to see the X-MET8000 analyzer in action visit www.hitachi-hightech.com/hha or email contact@hitachi-hightech-as.com to book a demo.

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X-MET8000 RANGE

Our range of handheld XRF analyzers, the X-MET8000 series, delivers the speed and performance required even in the most demanding applications. Suitable for all analysis needs from scrap metal analysis, precious metals and jewellery analysis to positive material identification (PMI) for inspection and manufacturing applications, and regulatory compliance screening.

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